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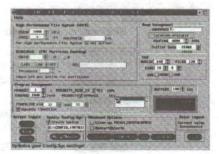
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extended attributes

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COMMONE

Making changes, staying the same

by Bill Schindler, editor-in-chief

First, I'd like to thank Craig Greenwood for taking over as reviews editor. In the past, Craig has written many of the reviews for extended attributes, so he has hands-on knowledge of the process.

I'd also like to give a huge thank you to Steve Gurnick for doing a great job as reviews editor for the past two years.

Out of the closet

I'm writing this about two weeks after the meeting with PSP's General Manager, Mike Lawrie. We should have details of what Lawrie said in the next issue of extended attributes.

By now, most of you know that the meeting was not upbeat. Lawrie didn't say outright, "We don't want you" but he sang several variations on the theme. The emotional results for many of the meeting attendees were either anger or sadness. A few people announced that they were going to move to something other than OS/2.

But by far the general consensus among attendees and those on the members listsery is that they're staying with OS/2. The sentiment I've seen and heard over and over is, "There's nothing better."

I think what most of us are upset about is that IBM finally confirmed our years-long suspicions. IBM its relatives. IBM never really wanted home users or small business. So, they finally "came out of the closet" (as one member aptly put it) and said so.

So what?

into the real world

Nothing really changes for the Society. The Society is here for its members. As a user group, we continue to have the primary role of users helping users.

If anything, we are more important to each other, now. In my experience, most OS/2 users are always willing to help each other. I don't expect that will stop or even slow

down; I have already seen signs that it's probably going to increase.

OS/2 is still alive. There's new software for OS/2 coming out almost on a daily basis. The user community has pulled together to produce conferences like OS/2 Marketplace and Warpstock.

Sure, some of us will dabble with never wanted Team OS/2 or any of alternatives; some who haven't yet, will want to prove for themselves that "there's nothing better." That's okay, because OS/2 users for the most part represent people who believe in making informed, intelligent decisions.

> But so long as we, as a community of OS/2 users, continue to believe that OS/2 is the best option, the Phoenix OS/2 Society will continue to exist.

> We may refine our goals. We may rethink how we do things. But we will still be here.

OS/2 users helping and supporting OS/2 users. That's what we're about.

Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society, Inc (POSSI) is an organization of computer users with an interest in IBM's OS/2 operating system.

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on the bitstream

How to be a master beta tester

by Esther Schindler

Perhaps you submitted an especially pithy bug report. Maybe it's because you've participated in the company's online forums, and demonstrated that you understood their existing products. Possibly, you explicitly asked to be involved.

However you got to this point, you've somehow found yourself a beta tester for a software company's products. Now that the software has actually arrived, you realize that you're not quite sure what to do with

Don't feel embarrassed; you're not alone. All too often, beta testers flail around with the software, ineffectually but enthusiastically banging at it like a toddler hitting keys on a piano. They intend to make some music and hope that their contributions are in some way helpful, but they need a bit a training to teach them how to do so. In this article, I'll provide you with advice that should help you become good at the job of beta testing, so the software you care about is released as bug-free as possible.

Your expectations

Very often, software developers approach the subject of beta testing very haphazardly. They know that testing is necessary, so they solicit users like you. They send out code sporadically, hoping that you'll tell them when things go wrong. Other companies are much more organized, with a clear process and bugreport forms. But all too many software companies forget to tell you what you can expect from the company, from the process, and from the experience.

Let's cover that last item, first. Why did you agree to do this? (Late at night, when other priorities scream for attention, you'll probably wonder.) Years ago, when software was always expensive, beta testers could reasonably expect to be "paid" by being given a free package, and the promise of free software was enough to justify the time involved. Software prices have dropped precipitously, since then,

and you can't count on automatic free software.

Nowadays, you're most likely to participate in a beta test because you want to get your hands on the software first, because you want to have input in the product's development, or because you simply want to contribute to getting quality software out the door. All of those are good reasons. Come to think of it, getting a free copy of the software is still a good reason. A t-shirt isn't bad,

The beta testing process varies, but the essentials are straightforward. Every so often, the company will send you a "beta build" of the software as a work-in-progress. You're expected to test it, and report back to the company about the problems you encounter-and, almost as important, the ones you didn't encounter. (Many developers tell me that, "It's working fine here" is valuable feedback, and that too many testers forget to say so.) The number and frequency of beta builds varies, from "a few a week" to "one every couple of months." Naturally, this is as much a reflection of the application's complexity and the company's development cycle as anything else, but beta builds are likely to become more frequent as the release date approaches. The last beta release is sometimes called the "gamma," a release candidate; occasionally the company will ask for your approval before they send the software to manufacturing. (They might ignore your advice... sometimes at their peril.)

Some companies will require that you sign a non-disclosure agreement (NDA). They don't want their competitors to know about the existence and/or features of their new version, so you must agree that you won't say anything about it in public, or (sometimes) even acknowledge that you're testing the software. If you're asked to sign an NDA, by all means adhere to it. Even if you aren't asked to sign anything, behave as if you have done so unless you're explicitly told that it's okay to talk about the product. This isn't merely

politeness; you're talking about the company's intellectual property, and its ability to do business. Treat it with respect.

Your attitude

Almost by definition, the software they send you will have bugs. After all, if it didn't have bugs, they'd ship it. It's your job to find all the bugs you possibly can, and to report them accurately.

This attitude is a very important one to grasp. Software testing doesn't exist "to prove that the software works correctly." Software companies engage in beta tests to find out the reason it doesn't work correctly-so it can find and fix problems before paying customers encounter them.

Programmers tend to look for what's right about their application. They can't help it; they invest their own egos into the software, which is their creation. It's hard for anyone to see blemishes on his own children. Programmers also write software based on their expectations of what real users need-and those assumptions may be flawed. That's why they go through the time and expense of a beta test. They depend on you to find out what they did wrong.

However, don't make the relationship adversarial. They're not your enemies. You're working with the company to find the bugs in their code, not against them to demonstrate that their programmers are idiots. Beta testing is like playing a game of volleyball with friends. Even though both sides try to find the weaknesses on the other side's team, you're all engaged in the activity for mutual benefit and enjoy-

The best beta testers bring tenacity and honesty to the job. Think of beta testing as an ongoing puzzle you want to solve.

Keep in mind that the software isn't complete. Don't expect more than the company is ready to deliver. Especially in the earlier builds, features will be lacking or minimal. Help files usually don't appear until the very end of the beta cycle.

In particular, don't complain about missing features that the company says are missing. In real life, you might skip the read.me file, but in beta testing it's vital that you read the text that comes with each build. The beta documentation will tell you what's included this time around and, equally important, what isn't. Don't waste your time testing dragand-drop if the programmers haven't implemented it yet, much less writing up bug reports because it doesn't work correctly. The beta read.me will also tell you what's new in the current version (and thus most needing your attention and testing). It might ask you to check out certain features ("please try printing in color"), especially those whose results vary depending on hardware configuration.

Your responsiveness

Developers complain most often about people who sign up for a beta test, and then fail to participate. If you sign up to test, by all means test. As I mentioned before, a message that says, "Beta 3 works just fine; I didn't encounter any difficulty" is equally as valuable as a five-page response detailing problems. The "everything is fine" messages are sometimes clues to solving problem reports. For instance, if the Beta has trouble on some systems but not on others, knowing that it works fine with your brand of video card can be valuable information.

In particular, some vendors reduce the number of beta testers as they go through the beta cycle. For instance, a company might select 100 volunteers for the initial code release. They only continue to support and update those who respond, pruning the list so that only the "qualified" testers stay on. The "Beta 3 works fine" participants are just as qualified as are those who sent the bug reports; the essential ingredient is your responsiveness to the company. Even a message that says, "I'm too busy this time around, but please keep me on the list for the next beta drop" is okay, to a certain degree. Developers get cynical about the number of people who

apparently join a beta test just to get that don't work correctly. They're the free software-and with good

It's important for you to be responsive, but it's equally important for you to be timely. When a new release comes out, install it immediately and report as quickly as possible. If the company has released Beta 3 but you send in a bug report for Beta 2, everyone gets frustrated. There's often no way of knowing if your bug was already fixed in Beta 3; if it was, the time spent looking for it is time not spent creating Beta 4 (and the final product). If the Beta 2 bug wasn't fixed in Beta 3, the fix might break something that's in this build.

The company's point of view

During beta testing, users who send in suggested features and enhancements are simultaneously appreciated and resented. Most companies release software to beta test when the functionality is frozen. By the time you see the software, it's usually feature-complete. "Wouldn't it be cool if..." suggestions are frustrating because they often can't be incorporated in the current release. At the same time, however, the beta cycle is often the best time for a company to get real-world feedback about how the software ought to work. I was involved in one beta test in which the participants told the company, "Start over. This is terrible." (To the company's benefit, earning my lifelong loyalty, they listened to that advice.)

Feel free to make suggestions, but don't be upset if they're (apparently) ignored or left out of the final product. As a user, you're bound to think that your pet request is a small thing. Maybe it is. More likely, it isn't-not with the marketing manager breathing down the necks of the development staff, reminding them of the already-announced ship

When you do make suggestions, make a clear distinction between what are suggestions and what are bug reports. The latter are much more important, because no company wants to ship software with features

more willing to ship working software with "missing" features, knowing that the next version will be even better.

In busy beta tests, not every message you write will be answered. Even though most company personnel try to keep in close contact with everyone, sometimes it's just too much effort to send personal responses to every comment. Don't assume that the company has forgotten about you or doesn't appreciate your reports; they're just busy trying to incorporate the responses. Besides, how many times can you write, "Yes, I know we misspelled the product name in the splash screen"?

Don't be upset if you find bugs you reported in the shipped product. Yes, products do ship with known, minor bugs. Those bugs are usually scheduled to be addressed in the next release because the vendor feels the bug is rather minor, and any attempt to fix it could break other things-and they don't have the time for it.

How to test

Now that you have an idea of the attitude with which to approach the project, let's take a look at the specifics of how to test the software.

The most important kind of testing is normal use. You probably joined the beta test team because your use of previous versions of the software was in some way typical. Despite the attention I give to all the other ways to check out software, don't discount this item. While the company does need to know how the application bears up during unusual use, 99% of the time it will be used for ordinary purposes. Use it that way yourself, as extensively as possible.

The only problem with doing so is that, while you're trying to use the software "normally," you have to do so in a very self-conscious fashion. Since every bug report is structured in a "when I did this, it did that" manner, you have to be aware of what you're doing at all times, so if it crashes you know what that you were just up to. Be disciplined in

your approach to installing and using the software. Keep records of what you did. This may make you feel as if you're constantly pulling up the turnips to see how they're growing, which is an awkward way to "act naturally."

The other issue in "normal" use is that you can't use the application for work that really matters. Don't attempt to run beta code in a production environment using mission critical data, unless you like living dangerously. If, for some strange reason, you do decide you "must" take this level of risk, be sure to make frequent backups of your data. Like, every five minutes. And remember that a file you open or update with the beta might become corrupt; you may not be able to open it again with the previous version of the program. The safest policy is to keep everything separate, and not test fate. But doing so does make it harder to "use it normally."

If you're like me, in the course of ordinary use I might ignore some features and stress others. I can go for months without using the index feature in my word processor, or graphing something in a spreadsheet. Then I'll depend on those capabilities heavily for a solid week. Since the time allocated to the beta test is short, you'll need to compress your ordinary usage, or some features might not get the workout they deserve.

Make sure that you do tests within the application, such as creating documents and working with whatever features are available. But don't forget "integration" testing with other applications and environments. Find out what happens when you drag and drop from one program to another. Import and export files. Access external databases. Everyone in the test will be testing internally, but you're bound to have at least one unusual application or system configuration; it will help immeasurably to know how well the new product works in that environment.

Testing isn't simply a question of whether the feature works as advertised. Also pay attention to how the results from Beta 3 are the same

program works under a heavy load. Change your configuration options. Install the software several times (you'll do this anyway), with different options (you might not do this anyway). Examine its security features. See how well it multitasksespecially with other programs loaded. Any software in beta is bound to crash once in a while (though the best of them don't, even then); look carefully at how well the system can recover from crashes. If your usual duties include support of other computer users, consider (and report to the company) the issues regarding how a company might support an enterprise using the sys-

Arguably, you can't expect the same level of performance from beta software as from the released version. The programmers include debug code, so that when you do encounter a problem, they have a chance of figuring out where to look to fix it. However, in my experience, I've never had the released software run significantly faster than it did in the beta. If you think the software runs too slow, by all means tell the company so. Applications that are too slow to use simply don't get used; poor performance is as much of a bug as is a system crash.

Don't be afraid to tell the company that you like or dislike the way the software works in general. You're testing the user interface as much as anything else. And don't consider it silly to report cosmetic bugs. If text doesn't fit in a dialog box, or a menu option is misspelled, say so. This kind of bug is really easy to fix, but for some reason developers tend to miss them.

If you see a feature or just a better way to do something (which isn't listed in the read.me as an upcoming but not-yet-implemented item), let the company know. A good beta tester will have the author's ear and be in the absolute best position to dictate features... at least for the next version.

Create your own set of test documents or programs. Keep them around, and make sure that the results from Beta 3 are the same or

better than Beta 2 (in performance, accuracy, or whatever else applies).

Going to extremes

Every so often, when you're feeling devilish, let yourself play. Do what you can to break the program. Go to extremes. If the documentation says that the program can accept 100 values, find out what happens when you give it 101. If it's a text editor, try to feed it a 10 MB file, then do a global search and replace. Enter wrong information. Use wrong combinations. Do too much at once. Don't do enough. Do nothing, when the application is expecting input. This is much more fun at the end of a long arduous day, when you want to hit something. It's almost as much fun as a shoot-'em-up game.

In all of your testing, however, remember that finding a bug is only worthwhile if you report it in such a manner that the company can reproduce it. Make sure that your bug reports are accurate and repeatable. List your hardware configuration; note what system utilities you're using. Provide the vendor with concise "bug reports," even if they haven't provided you with a template. Be sure to give the stepby-step procedure required to reproduce the bug; before you report a bug, be sure you can reproduce it consistently. If the bug is "transient" (it crops up now and then), take special note of exactly what you were doing at the time as well as other things you did outside of the application (such as launching a separate application, printing a file, or changing a desktop setting) as the other actions might set up the scenario required to reproduce the bug.

Ready to go?

By now, you should have a good sense of what you can expect as a beta tester. You know what the your duties are, at least in general, and you have the basics for a testing methodology.

What are you waiting for? Go explore that software!

two warped Understanding the network computer

by David Both

You can find as many definitions for O Large staff required to support the term network computer (NC), as people attempting to define it. Therefore, this month I will try to explain how IBM defines an NC. The IBM definition of the NC is one key to understanding the future of OS/2.

The enterprise

IBM has been (and continues to be) a primary supplier of computing systems for the "enterprise." Enterprise is IBM's synonym for large business. These are the midrange and mainframe systems IBM sells into the enterprise environment and year!) which require a staff of people to program, operate, and support. This environment is ideally suited for the traditional centralized control so prized in many business organizations.

The advent of the PC in 1981 began eroding this control, much to the dismay of the Information Systems bureaucracy. When PCs began connecting to the mainframes to replace the dumb terminals and provide some "personal" computing power as well, the trend towards data anarchy in the corporate world accelerated tremendously.

Without attempting to take sides in this debate, there is much good to be gained from decentralized and personal computing. There are also many disadvantages. Support costs for PCs in the connected computing environment is significantly larger than for dumb terminals. The costs are generated as the result of many factors:

- O Original purchase cost of the hardware and software.
- O Original Installation cost in human resource: time.
- O Software upgrade purchase
- O Testing upgrades for compatibility with existing software and hardware systems.
- O Software upgrade human resource costs.
- O Costs associated with incompatible data formats: conversions, etc.

many personal computers. Assume, for example, that a large company has 25,000 computers. If it takes one hour per machine to upgrade to a new version of a key software package, it will take one person 25,000 hours, or 13.35 years to do the upgrades. (Based on the assumptions: 1 year = 52 weeks \times 5days/week × 8 hours/day - 10% for sick days, holidays, breaks, and vacations. This leaves 1,872 hours per person to be productive during the year. I know that I am always productive for at least 1,872 hours a

Enter the NC

IBM's enterprise CIOs have been trying for over a decade to control the costs of PCs in their domains. The NC provides them an opportunity to do so. For companies with large numbers of PCs, the savings in upgrade costs alone promises to be phenomenal. The only cost would be the time required to install the new software on the NC server. The next time the users loaded the software, they would be using the upgraded version.

Other PC companies see the NC as a way to increase box sales. Many new and unsophisticated users are terrified by computers. The NC becomes a home computing appliance, much like a TV or VCR is an entertainment appliance. At this level, the NC is not a computer any more; it is an information appliance which can truly make universal access to information a reality.

What is the NC?

In IBM's world, the NC is an information appliance which connects to an IBM mainframe (where over 80% of the world's data is stored). However, in many ways that is far less relevant than the concept of the NC as a true information appliance. There are two major schools of thought about what constitutes an

One approach is that an NC is a computer that contains no local disk storage devices. This, the purists say,

is a true NC because it depends upon the network for everything including the operating system, application programs, and all of its data. Everything is stored on the network and transferred to the NC only when it is required.

The second major group, primarily Microsoft, takes the stand that an NC is not what users really want, that instead they really want a NetPC. The NetPC has local disk storage as well as access to the network. The NetPC may have all or part of its operating system stored locally, and all or part of its application programs and data stored locally.

The IBM view

IBM's Donn Atkins and others have stated that the NC is not about boxes. They said that an NC is whatever you want it to be, in terms of hardware. Some companies want diskless NCs, and some want more traditional PCs. Either way, IBM has (or will have) a box to meet their customers' requirements.

IBM's strategy for network computing is grounded on the software side of the equation, rather than the hardware side. It is about providing software content for the information appliance via the network whether the receiving box is a personal computer, a NetPC, a network computer, or a diskless PC. Network computing is about making computing power available cheaply on the desktop with ease of use, zero or low software maintenance, and minimal support costs. It is designed to return control of the corporate computing environment back to the Information Technology department, and at the same time provide significant personal computing power to the desktop

I have coined a new term, the NetClient, which is any box which relies loads most or all of its operating system and application code and data from a network server. This fits very nicely with IBM's view.

The role of OS/2

OS/2 is key to IBM's network computing strategy. OS/2 is the ideal operating system for an NC. It is full 32 bit, modular, truly object oriented, and very reliable. It has a ten year track record, which is far longer than any other 32 bit PC operating system on the market today. Only a few minor modifications are required to the Warp 4 installation procedure to make it perfect as an NCOS.

Bluebird was IBM's code name for the version of OS/2 called WorkSpace on Demand. WorkSpace on Demand is OS/2 Warp 4 with only minor changes to the operating system itself, mostly in the form of changes to the Workplace Shell DLLs.

Because network computers fit into a different corporate Information Technology strategy than more traditional PCs, the operating system must be more flexible in providing for customized installation procedures. It must also be capable of loading from the network in

whole or in part. With the addition of additional user interface choices, OS/2 meets those requirements.

Network User Interface

WorkSpace on Demand (WSOD) introduces the concept of a Network User Interface, the NUI. A NUI is a User Interface provided to the client computer, via the network, from the server.

WSOD comes with a simplified user interface much like the Work-Place Shell, and the standard Work-Place Shell can also be used. Many companies will choose a different user interface such as Netscape. The advantage is that the Netscape user interface is one with which many people are already familiar, thus reducing user training costs. Using a browser interface rather than the more traditional (to OS/2 users, anyway) Workplace Shell also helps to shield less experienced users from the perceived complexity of OS/2.

Lotus Notes can also be used as the NUI. This is another common user interface with which many people are familiar. Other programs can be used as well; the EPM editor or FileStar/2 could be used as the UI with WSOD.

Serving the NC

WorkSpace on Demand resides on an OS/2 Warp Server system. When an NC is turned on, it boots from the network. That network might be a LAN or it might be the Internet. The operating system is loaded into the NC from the OS/2 Warp Server through the network.

Application programs are loaded from the Warp Server. It is currently expected that many of the applications used on NCs will be Java applications.

In my December column I will discuss what the NC and Work-Space on Demand mean for the future of personal computing. I will also have a few thoughts on Warp-Stock which should be in high gear as you read this. I hope to meet many of you at WarpStock!



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n ways to optimize OS/2 Warp

by Bill Schindler and Esther Schindler

Here's a collection of tips that may help you speed up your OS/2 system.

Kill the elephant

Beginning with OS/2 Warp 4, IBM (and later Lotus) provided an online registration feature. After installation, the "dancing elephant" will collect your information, and send it to IBM via the Internet, fax, or snail mail. Somewhere in the documentation, the "elephant" promises to ask you another series of questions a year later (presumably to ask you if you're happy with the software, etc).

If you use the Internet registration feature, your system will automatically be "stamped" as registered. Unfortunately, you never receive an acknowledgement (much less a registration ID) from IBM when you use the other methods. Nor is there any sign that IBM actually examines the data collected. Plus, the software is imperfect; you may be asked to register multiple times. More importantly, the "elephant" runs as a detached process in your system all the time—and it consumes about a megabyte of RAM. You may choose to kill the software to improve your system speed; here's how to

Open your boot drive, using the Drives object. Navigate your way down to the folder OS2\INSTALL\ Installed Features\Install Object—Inventory. Put a checkmark on "ART-Inventory" and click Uninstall.

CACHE statement

The HPFS disk cache program, CACHE, controls how OS/2 manages information it's reading from and writing to the hard disk. Because the hard disk is, necessarily, the slowest component in your computer, you can create a noticeable performance increase by manipulating the values the system uses.

In OS/2 Warp 3 and earlier versions, the CACHE statement was usually included as a "RUN=" in the CONFIG.SYS. However, using RUN in OS/2 Warp 4 may cause error messages, and a timing bug can make your system run slower. Instead, include the CACHE statement in STARTUP.CMD. Here's a sample, which should be a good starting point—though this is one of the "tweaking" items that will vary considerably by sys-

C:\OS2\CACHE.EXE /MAXAGE:7500

→ /DISKIDLE:60000 /BUFFERIDLE:45000

C:\OS2\CACHE.EXE /LAZY:ON

C:\OS2\CACHE.EXE /DSTG:ON

Just so you have some idea of what the system is doing... bufferidle specifies the time (in ms) since the last update before a dirty buffer is forced to disk. Diskidle controls the time (in ms) of inactivity before "idle" trigger starts writing dirty buffers. Maxage specifies the time (in ms) since the last physical write before a dirty buffer is forced to disk.

Decreasing boot time

If you have your desktop the way you want it, you will save some boot time by turning off archiving of your desktop. Right click on a blank area of your Desktop, select Settings (or Properties), select the Archive tab.

No bitmaps

It might not be pretty, but consider not using a bitmap background on the desktop. In the desktop's properties notebook, select the Background tab and click the color only radio box.

Turn off animation

If you really want to eliminate "wasted" CPU cycles, turn off animation on your desktop. On your System Setup folder, double-click on System. Look under the Window tab.

Be quiet!

Multimedia sounds are fun, but all those window openand-close sounds use 250 K to 300 K of RAM. If you're more interested in speed than in sounds, turn off the system sounds. (This won't keep your games from playing, just the desktop noises.) In the System Setup folder, double-click on Sound. Uncheck the Enable System Sounds box.

No Windows fastload

Beginning in OS/2 Warp 3, IBM provided the Fastload feature to speed up access to Windows applications running seamlessly on the OS/2 desktop. OS/2 achieves this by loading a stub of WinOS2 at boot time, and leaving it in memory for quick access. (In other words, a Windows application starting up doesn't have to wait for Windows to load first.) If you don't need it (you run Windows applications infrequently, or only in full-screen sessions), turn off this feature. In the System Setup folder, choose the WinOS2 Setup icon. Under the "3.1 Session" tab, make sure Fast Load is not checked.

Optimize your swap file

It's definitely a good idea to adjust the size of your swap file's initial size. To figure out the best value, take a look at SWAPPER.DAT immediately after you boot the system. Its size at that point in time is a good starting point for the initial swap file size. Even better, work the way you normally do, and peek at the SWAPPER.DAT file size every so often. Use the value at which it seems to hover. For example, I found that my system grew to about 25 MB, and didn't vary much in ordinary use. To set yours to the same size, change the SWAPPATH line in your CONFIG.SYS as

SWAPPATH=e:\swap 2048 25480

In my case, E: is my most-used partition on my leastused physical drive. You can find out more about this in the Command Reference in the Information folder; search for SWAPPATH.

That ugly FAT

The DISKCACHE line in CON-FIG.SYS controls how the cache is used for FAT partitions. By default, OS/2's "D" parameter allocates 5% of available RAM as a FAT cache. If you're 100% HPFS, using FAT only for floppy disks, then you're wasting RAM. Change the DISKCACHE statement to its minimum value, and get some of that RAM back. DISKCACHE=64, LW
See the Command Reference for DISKCACHE to learn more about its parameters.

Ransom your fonts

Each installed font uses at least 2K RAM, even if the font isn't being used. Using a font increases the memory usage significantly.

If you have a "ransom note" style desktop with different fonts used in every folder, try using just a couple of fonts instead. Uninstall any fonts that you are not using.

Better still, use FontFolder to install and uninstall fonts as you need them.

Performance tools

by Esther Schindler

Not everyone wants to spend a lot of time tweaking her computer system. OS/2 vendors offer a wide variety of utilities, with an even wider range of prices, to help you optimize the system performance. All of these are good values, each at its price point.

- O SWAPMON is a free utility which you can find on Compuserve or the Internet. It displays a tiny window showing the amount of RAM in use and the current swap file size. The utility also has a feature to change the swap file value for you, but it bases its recommendation on your "high water mark" rather than an average or other measurement. For the price, it's a great tool.
- O Clear & Simple's Performance Plus V4 is reviewed in this issue of extended attributes. It provides several utilities to improve system performance.
- O Bon Ami also markets a system monitor tool, which has logging facilities and other niceties showing the system behavior over time.
- O The newest version of Stardock's OS/2 Essentials includes a benchmark program (though I haven't used it yet, so I have no opinion).
- O At the top end of the scale, IBM has a tool called SPM/2. SPM/2 isn't cheap—last I checked, it was about \$500—but it does a superb job of testing system behavior on clients... including over the network. It's included free with OS/2 Warp Server, and the client support is in the OS/2 Warp 4 Bonus Pack.

.press release CDS enters tape drive hardware market

Computer Data Strategies, Inc., the leader in OS/2 based backup and recovery software, has announced over 20 different tape drive kits, all bundled with Back Again/2 for OS/2.

"As an OS/2 backup software developer, we often get asked to recommend a tape drive that works well under OS/2," said Brent Bowlby, President of CDS. "Now, CDS is combining our years of experience with tape drive hardware and packaging it with Back Again/2 to bring you a complete hardware /software solution at unbeatable prices."

CDS offers tape drive kits, ranging in backup capacity from 4/8GB with the popular Seagate TR4 tape drive to over 280GB with the Quantum DLT 4700 autoloader.

Each tape drive kit has been certified by the company's own qualified technicians to fully operate under OS/2 Warp and OS/2 Warp Server, in addition to being backed by a 30 day money back guarantee.

CDS is selling the tape drive kits direct to end users and has just completed mailing out a brochure featuring selected tape drive kits, media, cables and accessories. In addition to quarterly mailings, CDS

has an online catalog on its Web site at www.cds-inc.com. The Web page is continually updated with new products, prices, and special closeout items; visit it often for special tape drive bargains!

Back Again/2 Professional Edition v4.0 is available through leading OS/2 resellers as well as directly from Computer Data Strategies. The company also offers a competitive upgrade program.

CDS can be reached at 612-730-4156, 800-284-4156 or at www.cds-inc.com.

filters in MR/2 ICE

by Julian Thomas

Julian Thomas is a retired IBM engineer and programmer who uses OS/2 for almost everything; he, his wife Mary Jane, and Matinicus (a red Maine Coon cat) now live in the beautiful Finger Lakes Wine Country of New York State.

MR2/ICE (or mr2i) is my mailer (and newsreader) of choice for a number of reasons. Among them is its powerful filtering mechanism, which allows a variety of processing of incoming (and outgoing) messages as well as news headers. In this article, I introduce you to some of the capabilities of filters; for illustration, I'll use the filters and auxiliary programs I wrote to manage the recent PMVIEW group buy.

The filter process

When you select Filter maintenance and then New (to create a new filter) there are three filter definition screens:

- O Criteria: What messages does this filter handle?
- O Actions: What does it do?
- O Disposition: What happens to this message after this filter is applied?

Figure 1 shows the Criteria screen for the filter I use to move POSSI mailing list traffic to its own folder. Let's

look at it in detail.

The description and tag fields are selfexplanatory. The filter is enabled for inbound mail. (I could have made it an my own rantings are messages from my outbox once they are echoed.) Search type is simple and limited to the To: field of the header. If the text

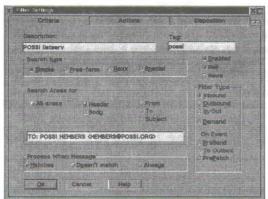


Figure 1. The Criteria screen.

string shown is found in that field, the filter will be activated, since I specified Process When Message Matches. For this filter, the Action specifies to copy the message to a folder (in this case, my POSSI list folder) and the Disposition is to "Keep message out of the inbox/outbox; check no further filters" (see Figure 2). The next example will show use of the Action screen.

Gross this reasonage in the relate arriver surhain This default is to set incoming messages in the Indox and outgoing in the author. Descring also option preserves to the U.S. and and This option marks the manages so it sill MOY be listed in the imbox or outbox. The message is pleased on to be oreacked by the variating listers. The color marks the message at \$ 38 NOT be based in the lighter of outbook. He further filering is performed, any remaining filers are bigassed. OK Carpol Hill

Figure 2. The Disposition screen.

The group buy

Now let's look at the PMVIEW group buy and how I used a filter (and an associated REXX program) to automate the process. As you may remember, I requested that those signing up for the "buy" send me email with a specific subject. I used the subject as the Criteria for my filter (see Figure 3). In this case I used a Freeform search, which is more complex, but more powerful than a simple search. I wanted to use the logical operations to ensure that no replies to action messages (prefixed by Re:) would trigger the filter, and that any requests sent to the POSSI list would not add the list itself as a requestor. (Actually, I added that one after the horse had been stolen once and the list received my autoreply in error.) The codes (such as {F}) used in freeform expressions and the rules for making logical expressions are described in the Webbased manual and in the history.txt file distributed with mr2i.

Figure 4 shows the Action for this filter. Note that a number of actions are specified. In addition to copying the messages to a dedicated folder (PMVIEW buyers), I also checked Autoreply. In turn, that specifies a template for the autoreply message; the template contains the text for the message. Link to Rexx activates the possipmy.cmd program shown below:

```
/* mr2i filter aid to capture pmview buy
                    addresses */
                    /* Julian Thomas 1997 */
                    outfil="possipmv.lst"
                    parse arg msgfil .
                    '@echo off'
                    z=stream(outfil,'c','open write')
In/Outfilter, but since z=stream(outfil,'c','seek <0')
                    z=stream(msgfil,'c','open read')
echoed by the listserv, lin=linein (msgfil)
Imerely delete my sent do until (length(lin)=0)
                      /* process header */
                      f= ' '
                      rt=''
                      lin=linein(msgfil)
                      linx=translate(lin)
                      /* test to see if we found it */
                      if pos("From:", lin) = 1 then f=lin
                      if pos("REPLY-TO:",linx)=1 then rt=lin
                    end
                    if rt > '' then parse var rt xx user
                    else parse var f xx user
                    lo=lineout(outfil,user)
                    s=stream(msgfil,'c','close')
                    s=stream(outfil,'c','close')
```

mr2i passes the filename of the message file to the REXX program as an argument; in this case, the file is only read, but the file could be modified, too. The program opens the message file and a list file (seeking to the end of the latter), and then reads the header, looking for a Reply-to or a From line, which is parsed to extract the email address of the originator of the message.

As in the earlier example, the Disposition for this filter is "no further processing." Note that this makes the sequence in which the filters are processed critical; the main filter definition screen provides for controlling this sequence.

The possipmy.lst file contains the list of all who have sent the magic message. Actually, I maintained the list

in another file, and periodically imported new entries from possipmv.lst into my master list, where I identified the checks recevied. By copying sections of my master list into other LST files, I was able to use the mr2i address group facility to send out mailings. Initially I used this to disseminate the information about the final price of the software, and where to send the checks; subsequently I sent acknowledgements

or reminders. Figure 5 shows two of the group definition screens I used, taking advantage of the ability to specify a group by an external file (the screen shot shows both the initial Distribution Group Maintenance window and also the "Edit Group Address Entry" (after I had selected Add in the first window; then "Find an Address File" in the second window, and selected the appropriate file from the resulting

file selection window). My reminder messages were sent out by first updating the pmvno\$.lst file in the mr2ice directory, and then sending mail with a tag (alias or nickname) of pmvnotpd.

Since the master list contained the email addresses of the buyers, it was used by Raja to send out the registration

keys directly; the addresses were untouched by human hands. @



Figure 3. Creating a freeform search.

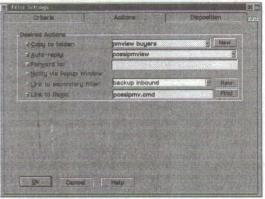


Figure 4. The Action screen.

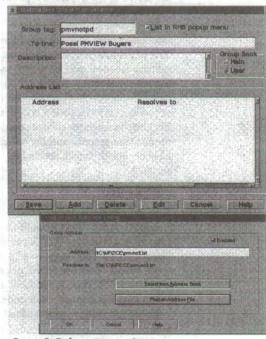


Figure 5. Defining an email group.

Database Management

" C/C++ & REXX

dbfLIB for C and C++ Development

- ✓ Supports DBF, DBT, FPT, NDX and NTX file formats.
- ✓ Accesses data safely in multithreaded programs.
- ✓ Provides indexing, memo fields, network support and soundex searching.
- → Runs on OS/2, Windows, Windows 95, Windows NT and MS-DOS.
- ✓ Handles IBM, Microsoft, Borland and Watcom compilers.

dbfREXX for REXX Development

- ✓ Supports DBF, DBT, FPT, NDX and NTX file formats.
- ✓ Accesses data fields directly with stem variables.
- Provides indexing, memo fields, network support and soundex searching.
- ✓ Supports VX-REXX, VisPro REXX and the built-in REXX interpreter.



See what OS/2 User Group SCOUG has to say about InfoOnCall:

www.InfoOnCall.com

dSOFT Development Inc.

281-537-0318 WW

www.dsoftusa.com

.the president's corner

by Lee Baldwin

Recently, a member of the Phoenix ISPs will sell, supply, or rent the OS/2 Society asked a question about network computers (NCs) on the user group listsery. Because I was also looking at the news server on the Internet at the time, I posted both the question and my response on the comp.os.os2.advocacy news group.

In my message, I suggested that the NC could be connected to the Internet via an ISP (Internet Service Provider). The ISP would function as the server that supplies most of your operating system, all of the requested software, and a repository for your personal data.

This produced around forty intelligent responses and one flame! The net result of all the postings, coming from all over the world, was that the capability is here now. It merely relies on the presence of a network computer (using Java or the like), the bandwidth of your communication system, and the willingness of your ISP to provide the service!

A home NC

IBM and others are selling the NC boxes right now. What would be required for a home NC? Various configurations were suggested, all of an ISP for a mere \$30 per month). which would be in the same price range as a VCR. Java, as with all pro- is that there are no adjustments. You gramming languages, is still under development, but is quite robust

Will the ISPs provide this service? Does your cable company have pay per view channels? The technology is there, so of course the software.

That leaves only the bandwidth requirement. Cable modems are arriving; they probably have ample bandwidth if we stop downloading all of those massive fixpacks, patchkits, and betas. Satellite connections are the same way, ample to you, but limited response bandwidth. ISDN is not popular here in the states, but in other parts of the world it is standard. APS (the electric company) is stringing fiber optic cable and supplying Ethernet connections out in the countryside to its rural custom-

A new kind of shopping

So, when you next walk into Circuit City and listen to the computer saleswoman, it may go something like this. You can choose between these options: this Baldwin Network Computer, for \$300 (we will set you up with an ISP for \$35 per month, and all you have to do is go home and plug it in). Alternatively, you can get one of these Wintel Wizbangs that costs \$1500 (the software will need updating in a year or two for a couple of hundred dollars, and you may still want to connect to

The bad thing about the Baldwin cannot modify the system to speed things up, you cannot keep parts of your old software laying around, and you probably will never get to find out what's inside the box-because if it stops working the things are so

cheap you would probably just replace it!

...and the effects

Now that I have scared myself to death, what does all of this mean to the Phoenix OS/2 Society? First of all, all of our OS/2 boxes will run Java and can act as network computers, so we don't have to throw them away! I, for one, am not going to go totally NC! I enjoy a certain level of privacy between the computer and myself; NCs are public. Throw in good old dual boot with my private drive invisible to the NC side and I can hide all I want. My laptop will probably always have a stand alone environment, as will a lot of other computers. Will it be the Bluebird version of OS/2? Not while I am a professional data processing person.

The unanswered question in my mind is: where does the Society go from here? This is a question that your Board of Directors and officers are going to have to deal with. We have made great strides in modifying the organization to be a worldwide, online group. Is this the future for all PC user groups? If you have thoughts on this subject, I would be happy to discuss them with you.

(Incidentally, if you're a member of the Phoenix OS/2 Society, you should be automatically included on the listsery membership list. However, in our early days, we didn't collect email IDs on the membership form. If you're not on the listserv and would like to be, drop an email to the membership officer, and she'll remedy the situation.)





. October meeting Getting your business on the Internet

by Esther Schindler

We all use the Internet for email and Web surfing. Now, a growing number of us are responsible for providing Internet services to others—and for creating a Web presence for your own (or another's) business.

At the Phoenix OS/2 Society's general meeting on Tuesday, October 14, you'll learn how to create a Web server using Lotus Domino Go Webserver.

A tangled Web

Domino Go Webserver is meant for Web developers, departmental managers, and Webmasters who need to quickly and easily establish a Web presence to publish business information

ant," offering the latest in Web security and server application support on a wide range of computing platforms. It supports all the expected Internet standards, including HTTP 1.0 and 1.1, NSAPI, GWAPI (Go Webserver API), SNMP, CGI, PICS (Platform for Internet Content Selection), and SSL. Java development support is included, along with servlets and server-side includes. (Don't worry if you don't know what these mean. You'll learn, at the meeting.) Tools for analyzing your server's performance and behavior are built-in, as well as search tools for the site's users.

Domino Go Webserver is available for OS/2, AIX, Windows 95

and Windows NT, Sun Solaris, HP- About our speaker UX, and (soon) for OS/400 and OS/390. The same technology is also available for S/390 mainframes, so you have plenty of room to grow. (Marketing people call this "massive scalability and the ultimate in performance." Techies describe this as "you won't have to reinvent the

Domino Go Webserver Pro (which costs a couple hundred dollars more) includes everything in the not-so-Pro version, plus Lotus' BeanMachine for Java and NetObjects Fusion. These are available only for Windows 95 and Windows

The BeanMachine lets you The server is "buzzword compli- employ a set of reusable Java parts, called Beans, to build or enhance Java applets on your Web site. Beans include sound, animation, image, rollover button, ticker tape, URL link, E-mail link, and JDBC data access. You can create new Java-Beans or classes, and connect them with existing code, or parts you create yourself.

> NetObjects Fusion lets you control a site's structure, create and maintain individual pages, and manage the files and other resources of

We won't stop there, however. We'll talk about the issues of creating a lively, dynamic Web presence for your business-what makes a Web site work, and what problems

you can avoid.

How cool is this subject? I can't miss this obvious opportunity to point out that, by the time of the meeting, the Domino Go Webserver FrontRunner (by Esther Schindler, Bill Schindler, David Moskowitz, Dennis Fowler, and Dirk Terrell) should be on bookstore shelves.

Experimental Psychology from Texas Tech University. Bob has been employed as a Human Factors Engineer in various IBM software development laboratories for the past ten years; he's a Certified Human Factors Professional and a member of the Human Factors & Ergonomics Society.

IBM's Bob Kreigh has his Ph.D. in

Bob has worked on various software areas, including text editors, GUI standards (such as CUA), image systems, network management, and Internet applications. For the past few years, Bob has been working with the IBM Internet Connection Secure Server team, and more recently the Lotus Domino Go Webserver team.

As a Human Factors Engineer, Bob's work focuses on "ease of use" issues in the design of user interfaces. Common activities include: usability requirements gathering, customer focus groups, GUI design and development, iterative testing, competitive analysis, and competitive benchmark testing.

When and where

The general meeting will be held at 7:00pm on Tuesday, October 14, at the Mountain Preserve Reception Center (1431 E Dunlap). The O&A session begins at 6:30pm; we're certain to convene at Coyote Springs afterwards.

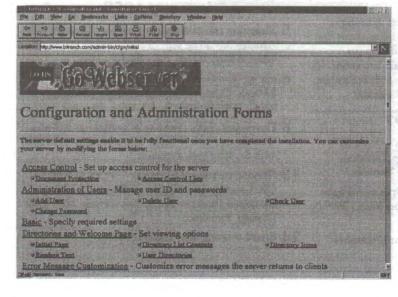
General meeting

What

▲ Domino Go Webserver Bob Kreigh, IBM

where

▲ Mountain Preserve Reception Center 1431 E Dunlap Phoenix, Arizona



coming events

This is a list of events scheduled by the Phoenix OS/2 Society. Unless otherwise noted, active members may attend any scheduled event for free.

Meeting notes

For the latest updates on the Society's event calendar, check the Web site at http://www.possi.org.

For meeting information and other queries, call the Phoenix OS/2 Society's voice mail at 602-949-4341.

If you have suggestions, ideas, or comments on the content of general meetings, contact the Society's Program Chair, Esther Schindler, at the general meetings or send email to esther@bitranch.com.

October 1997

- 5 Magazine submission deadline for October issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 7 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- **7** LAN SIG. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 14 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 14 General meeting; Lotus Domino Go Webserver. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 20 OS/2 Marketplace conference committee meeting (and unofficial FOOD—"Friends Of OS/2 Dineout"—SIG). Email Rosey Rosenwald at robert@perfectniche.com for location, time, and cuisine.
- 25 Warpstock in Los Angeles, California. Visit www.warpstock.org for details.
- 28 Board meeting and magazine prep. Meeting is 6:00pm to 9:00pm. Eat a dinner, learn about the inner workings of the Society, and help get extended attributes ready to mail. Location: Bill and Esther Schindler's house in north Scottsdale. Note: Special day and time due to Warpstock!

November 1997

- 4 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 4 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for December issue. Articles should be sent to

- editor@possi.org. For other arrangements, call 602-585-5852.
- 11 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 11 General meeting; CDS Back Again/2. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 22 Board meeting and magazine prep.
- 24 OS/2 Marketplace conference committee meeting.

December 1997

- 2 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 2 LAN SIG. Meeting is 6:00pm to 8:00pm. Coordinator Elliot Abramowitz. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 5 Magazine submission deadline for January issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 9 HOW (How OS/2 Works) GIG. Meeting is 3:30pm to 5:30pm. Coordinators Rosey Rosenwald and Stan Kropen. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- **9** General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 20 Board meeting and magazine prep.
- 29 OS/2 Marketplace conference committee meeting.

January 1998

- 5 Magazine submission deadline for February issue. Articles should be sent to editor@possi.org. For other arrangements, call 602-585-5852.
- 6 net.sig (Internet SIG). Meeting is 6:00pm to 8:00pm. Coordinator Mike Briggs. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 6 Developer's SIG. Meeting is 6:00pm to 8:00pm. Coordinator Lyle Wilson. Location: KDC, 2999 N 44th St, 4th floor, Phoenix.
- 13 General meeting. Meeting is 7:00pm to 9:00pm. Q&A session is 6:30pm to 7:00pm. Location: Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.
- 24 Board meeting and magazine prep.

October

SMTWTFS 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

November

SMTWTFS 2 3 4 5 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29

December

SMTWTFS 1 2 3 4 5 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

January

SMTWT 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

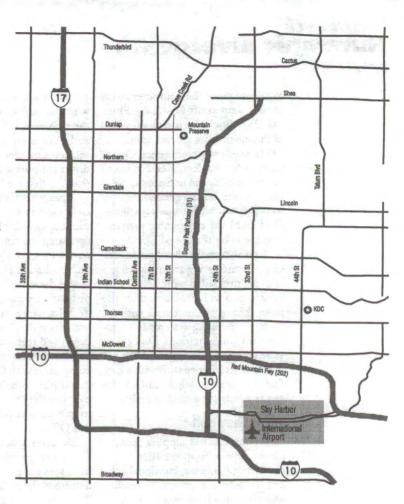
Meeting locations

General meetings are held at the Mountain Preserve Reception Center, 1431 East Dunlap, Phoenix.

From the Black Canyon, exit at Dunlap and head east. From the Squaw Peak, exit at Northern. Go west to 12th Street, turn right and go north to Dunlap, turn right, and it's two blocks up on the right.

The "How OS/2 Works General Interest Group" now meets at the Mountain Preserve Reception Center on the afternoon of the general

The Internet SIG, Developer's SIG, and LAN SIG all meet at Knowledge Development Center, 2999 N 44th St, Suite 400. That's just north of Thomas, in the building with the green dome. Plenty of free parking space is available in the garage behind the building.





If the mailing label on the

back cover says "sample,"

then this may be the only

attributes that you will

ever receive. If you want to keep getting the magazine

(and receive all the other

benefits of membership), you

must join! A 12 month mem-

\$30. (See the form for mem-

areas.) Tear out the applica-

tion form, fill it in, and mail it with the membership fee to the Society's address.

bership in the US is only

bership pricing in other

copy of extended

net.SIG

by Mike Briggs, mike@possi.org

We looked over news readers at the last meeting. PMINews is made by SouthSide Software, and marketed by Stardock. We saw how to set up the reader with a news server and then create lists of news groups to read. We also saw the latest beta of ProNews by Panacea Software. Both are fine newsreaders you should

Beginning with the next meeting, we'll start looking at multimedia on the Internet, like the plugin pack for Netscape, QuickTime movies, and more. If the beta of Communicator for OS/2 is released by the next meeting, we'll look it over then. Either way, see you there.

by Robert (Rosey) Rosenwald

The HOW GIG met on Tuesday afternoon and had 12 attendees. Among the subjects covered were potential pitfalls to avoid when upgrading motherboards, and differences between SCSI and IDE disk drives.

There is some interest in moving the time and place of the HOW GIG, but there has not yet been agreement on whence and when to move it. The next meeting will be at the Mountain Preserve Reception Center on October 14 with Stan Kropen who will be discussing... well, we'll all just have to find out!

.lastmonth **Harmonic divergence**

by Joel Frey

While much of the computer indus- ter-performing or less-expensive try has written off OS/2, the Phoenix OS/2 Society is moving forward with plans for its second annual OS/2 marketing conference. One of this year's attendees, Ken Espiau of Computer Central in Sedona, AZ, came to our August general meeting to talk about his business reselling IBM and IBM-compatible systems that focus on the use of OS/2.

Ken also spoke about the intricacies of configuring and delivering systems preloaded with OS/2, and how to deal with problems that arise from sharing the hardware with "other" operating systems in multiple boot configurations. Don't even start with the New Age and harmonic convergence stuff with which Sedona is now widely identified; this guy is firmly grounded in reality.

What they sell

Computer Central supplies complete systems (from the IBM PC Company, Compaq, Hewlett-Packard, Toshiba and others) to small and midrange businesses and to home users. Although Computer Central has a retail store, it does not sell "home-built" component systems; their national customer base requires the reliability and widespread local warranty service that's only available through the larger companies.

Computer Central specializes in configuring consumer systems with the MWave services ("they are a little touchy") and Soundblaster compatibility in native OS/2, WinOS2, and DOS, ensuring that entertainment software works properly. They also provide special configuration of hard drive partitions at customer request, and train their sales force to understand the requirements.

The company is an authorized reseller for the brands mentioned earlier, which means that the systems are fully warranted "even with OS/2 installed." Ken pointed out that OS/2 customers have a preference for systems from the IBM PC Company which he called "unfortunate, because in many cases others (Compaq in particular) make a bet-

workstation." Compaq certifies their systems as OS/2-compatible, and a Houston team has the job of making sure that the OS/2 device driver support for their systems is equal to that for Windows.

Computer Central encourages customers to understand "you're running OS/2, it's the world's best operating system, and you should have a choice of platforms to run it on." Although Hewlett-Packard no longer delivers OS/2 preloads, they provide very good OS/2 support. Toshiba, which they've been dealing with for only nine months, "sat down and really worked with us to make sure their machines would be compatible with OS/2. I hate to say it, but [they were] even more receptive than the PC Company, in regard to making sure [the Infinia] would run OS/2."

Business orders at Computer Central range from a couple of machines for a small business, up to hundreds for its largest customers. The reason OS/2 makes so much sense for businesses, particularly small ones, is that they can't afford the down time. "They can't afford to have an unstable API set, that forces them to constantly spend money to upgrade and enhance a nonfunctional operating system." He said he didn't want to get into "a Microsoft bashing thing; they do make some nice products, just not in the OS arena."

One of the things that made this a great presentation, aside from Ken's detailed knowledge of the subject, its question and answer format. Ken has a lot of experience with a variety of hardware running OS/2, and the audience was ready for answers. Most of us deal with one or two systems; except when desperation sets in, we are pretty much stuck with our hardware

Plug and pray

One of the trickiest parts of configuring these systems seems to be getting the hardware properly

configured so OS/2 and Windows 95 can coexist.

Although OS/2 supports Plugand-Play (PnP), it does not dynamically assign the resources. Windows 95 does, and reassigns IRQs in the process. Originally, Windows 95 was supposed to provide a method to lock the resource assignments via registry variables. "What we've found is that it's not doing consistently what it's supposed to-and that leads to a number of issues," said Ken.

Most boards can be taken out of PnP mode, but the method used can be critical. In the case of 3Com network cards, both OS/2 and Windows 95 must be manually configured. US Robotics modems become invisible to Windows 95 when they're not in PnP mode, but OS/2 sees them; the reverse is true when the modem is jumpered back to PnP. "The issue is really with Windows 95. There is no reason for it to reassign the resources." According to Ken, "Microsoft has said they will fix that problem... please buy Windows 98."

It's interesting to note that Windows NT is in the same boat as OS/2 in this situation, because it too does not support PnP. "Plug and Play was a great idea," said Ken, "but there are still too many problems with it." He said some manufacturers have, or are working on, ways to defeat PnP at the BIOS level, so that the resources can be manually assigned.

Compatibility testing

Ken also talked about compatibility testing by the manufacturers, not just for OS/2, but for UNIX as well. For example, in a set of twenty new hard drives they tested, none passed Compaq's initial compatibility testing; specific results are returned to the manufacturers for remedial action. When Compaq guarantees compatibility, they mean it. Ken has seen Compaq supply a customer with an off-the-shelf video card to replace the built-in one, because the original did not function properly, in some obscure way, in WinOS2.

Computer Central also tests for backward compatibility when they bring in a new machine, which he considers necessary because of their wide customer base.

A technical comparison

Ultimately, OS/2's real competition in the marketplace is Windows NT, and stability is the main issue.

OS/2 and NT use a similar "ring" memory protection model. Ring 0 contains the most trusted software including certain device drivers (such as the video and hard drive), with other drivers and applications in outer rings. Applications run in ring 3, where they won't affect the operating system if they fail. Ken said, "If you crash in OS/2, you will generally have a ring 0 issue. About the only thing that can cause OS/2 to lock up is when a device driver (that is, a video or hard drive device driver) fails... or an application tries to modify ring 0, which OS/2 generally will not permit. Windows NT 3.51 ran on the same model and because of this design you get slower performance... It's a tradeoff between stability and performance. IBM has been working for ten years to enhance that performance. They have the experience to correctly enhance performance and maintain stability. In Warp 5 you're really going to see a lot of enhancements in performance; it's the major focus of that product. [Microsoft's approach] is to combine the GUI (the graphic kernel) into the core OS kernel. The thing that hangs the most, [they] put into the core OS, so that if you hang the GUI, you're going to hang the [operating sys-

Ken described being at a Lotus class for training recently, where they ran Lotus Notes on Windows NT servers; the systems would hang several times a day. "Windows NT would pretend to shut down the applications, but it could not shut down all the threads. When you tried to relaunch Lotus Notes, it wouldn't do it; it says it's already running (because of the threads). So what really happens is, you must call all one thousand users (the number Microsoft says it can handle), and tell them you're taking the server down."

Wrapped around with evil

Ken spoke of Microsoft's grudging support for Java and its attempt to "proprietarize" it with ActiveX (which he called "Java wrapped around with evil"). He described Novell's demonstration of ActiveX at a Compaq Innovate Forum, in which they stuck an ActiveX component into a Quicken program and causing Quicken to transfer an entire bank account to Microsoft's. All of Ken's corporate customers have issued a policy of "no ActiveX," as "it has developed a reputation as a security issue."

Most OS/2 users realize that Java is the future of applications on OS/2. Corporate users and systems marketers like Compaq have recognized the high support costs associated with Windows, but Microsoft has successfully enforced previous contracts to keep these vendors from shipping OS/2 easily.

Practical matters

One of Ken's main points was the long-term practicality of OS/2. He put it succinctly. "For these reasons OS/2 makes more sense for small and midrange business, besides [for] the corporate customers: It's going to cost you less; it's going to run more and more applications, and run them correctly and stably, and you have ten years of history of IBM (as dopey as they've been) supporting this operating system. Ten years ago, I believe it was, Microsoft was shipping Windows 3.0; how many Windows applications today run on Windows 3.0? None, there aren't any commercially available. I still can run DisplayWrite 1.1 for OS/2 in Warp 4, it works. That's a big, big difference and it represents stability. Even Windows 3.1 applications, Microsoft wants to crush as fast as they possibly can to force you into Windows95. At any cost they will do that. It drives me nuts as a support person. It's not logical and it's not to the benefit of the customers, but it does make Microsoft richer." As if to underscore this point, someone in the audience noted that Windows 3.0 actually started shipping in 1990.

Someone in the audience asked about running a Windows application in OS/2, having been told by the vendor's technical support that the program wouldn't run in OS/2. Ken said this is the kneejerk response of many vendors. They haven't actually tried to run it, they just assume it won't. "They don't understand the concept of WinOS2."

Ultimately, the future of applications on OS/2 probably lies with Java, not only because of the difficulty of reverse engineering and maintaining compatibility with the Windows 95 API set "because it changes daily," but because it is the core of IBM's Network Computing strategy.

Ken recently attended a showing of the "Bluebird" NC and developed an appreciation for it from a support standpoint when he realized "there's no CONFIG.SYS, no AUTOEXEC, there's nothing the users can screw up on this machine... I've got users with fiveuser networks and they're spending beaucoups bucks, not because their operating system crashes, but because the users have to tinker with it, and all of a sudden that goes away. There's no Solitaire unless the network administrator puts it on there. It really is going to be a cost-effective way of distributing clients; I can design everyone's desktop from my server. I don't have to run out to a thousand machines, or even five for that matter and [configure them]."

He described seeing Microsoft's Net PC running Windows NT. "It's the stupidest thing I ever saw. It's Windows NT with no floppy drive... They've eliminated no problems"except that the user cannot load software from the floppy drive. And that was the kindest comment he made about it.

I wish I had more room to cover this excellent presentation. It was nice to hear some encouraging words about the viability of OS/2, for a change. As it is, I've already created a great deal of work for the editor.

Yes, there is a harmonic convergence in Sedona, but it has to do with a great operating system and some select hardware. Crystals have their place in this, too. The clock circuits depend on them.

building blocks A cosmetic facelifi

by Marilyn Pizzo

Somewhere or other, it's the fall sea- supports any Adobe Type Manager son, and thus time for a change. But or TrueType fonts) but the eight are why should tree leaves and clothing fashions be the main things to change? Why not change the way your desktop looks? Maybe a nice fall color scheme for your computer; after all, computers are people too. Or perhaps you could use a new mouse pointer; aren't you tired of the default arrow? You can also change fonts. This month, let's do a little cosmetic facelift.

A few mouse pointers

First, open the System Setup folder (located in the OS/2 System folder). Double click on the Mouse icon to open it. Now, choose the pointers page. This screen shows you the default system pointers.

Highlight Arrow, and press the Load Set button. This will load the group of predefined set of pointers for the arrow. Make a selection from the several choices shown; you can certainly change it back, or try something different, if you don't like cursor and fonts, let's change some it. Sometimes it is fun to change back and forth since it is so easy to do. Do the same thing for the text, wait, and all the other pointers.

You can also create your own pointers using the icon editor or copy others into the pointer directory. (Plus, you can find add-on software applications.)

Another fun thing to do with the mouse is to turn on the comet trail that follows the mouse cursor. The comet cursor tab not only allows you access to turning the trail on and off, but you can change the color and size of the trail. I found the comet trail just a little distracting, but it was fun to try out. It's worth it even if it only gives you a chuckle, and you later change everything back to the default settings.

Desktop fonts

Let's experiment a little more, and change the fonts on the desktop.

Go back to the System Setup Folder, and open the Font Palette. The default palette gives you a selection of eight fonts. OS/2 Warp provides you with many others (as it

sufficient to experiment with for

Changing fonts for any Workplace Shell object is a drag and drop operation. Select the font you want, in the Font Palette window, then drag it to the object whose font you want to change. Release the right mouse button, and the font will

You can also change a font within the Font Palette window. Double click on the font you wish to change, then select Edit Font. You can replace an existing font in the Font Palette window by using the Add button. You might want to change the size of the font, to help your eyesight. Again, these are just some fun things to do and experiment with without feeling like you need to be a rocket scientist.

Colorful language

Now that we've changed the mouse

From the System Setup folder, select Scheme Palette. The default palette can hold up to twelve schemes. To apply an existing scheme, just drag and drop the scheme to the Workplace Shell desktop. If you don't like your selection, change it again. If you like one of the default schemes but would like to make some minor changes, go for it. The Edit Scheme window is displayed when you double click the left mouse button on a scheme. You

are free to make changes.

Personally, I found it more fun to change individual colors instead of the entire scheme. From the System Setup folder, select either Mixed Color Palette or Solid Color Palette. Like the Scheme Palette, you can drag and drop a color to the object you want to change. If you are dropping the color on a folder object or the desktop, you need to check the Color Only box in that object's Background tab, or else the new color will not take effect. Depending on the color you choose, the text displayed beneath a folder's icon

may become unreadable. If this happens, you can go to the View tab for that object's Properties notebook. You will see a Title Text Display box. Select the Visible box to display text below the icon. Select the Background color button to display the Color Wheel; this allows you to specify the color of the background for the icon text. You can also change the Text color of the icon. Experiment with the different options to discover which you like

Sound advice

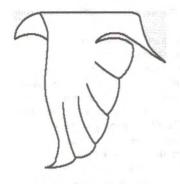
Have you ever wondered about the sounds you hear when you open and close windows? If you go to the Sound object in the System Setup folder you can see what .WAV file is associated with which system event. Then you can change the sound associated with a particular event.

Even though there are not a lot of sound files provided in OS/2 Warp 4, you can obtain other WAV files from the Internet. (Or even create your own using the Digital Audio editor.) You can also adjust the volume of the sound when your computer beeps and bongs. In the Sound object you will see a knob with a plus (+) and minus (-). Adjust the volume to your preference. If you check the box that says Apply volume to all sounds it will do just that. Adjusting the volume is one of the first things I did after loading OS/2 Warp 4; the preset volume was just a little loud for me.

Toolbar time

We all noticed a lot of Workplace Shell changes between OS/2 Warp 3 and OS/2 Warp 4. Gone is the Launchpad to which we had all grown accustomed. In its place is the WarpCenter. It was different at first but I find it second nature now.

However, there is still a feature you can use that is very much like the Launchpad. OS/2 Warp 4 has a Toolbar; it has a similar concept to the WarpCenter, but looks more like the Launchpad. The Toolbar is hidden in the OS/2 System folder. Double click on the Toolbar icon to



Falcon Networking

Home of the OSI2 Supersite

- Over 2 gigabytes of OS/2 shareware and freeware
- · Mailing lists such as OS2USER and WarpCast
- Home of several popular OS/2 web sites such as OS/2 e-Zine!,
 EDM/2, OS/2 Connect, and Timur Tabi's New OS/2 User page.
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https://secure.falcon-net.net/BMT/RIP/

.building blocks (cont)

open it. If you wish to have the Toolbar start automat- bar just drag and drop it on the shredder object in the ically when you boot up OS/2 Warp, you must include the Toolbar parameter in the Set Autostart= statement of the config.sys. For example:

SET AUTOSTART=PROGRAMS, TASKLIST, FOLDERS,

WARPCENTER, TOOLBAR

If you do this and then inadvertently close the Toolbar, you can restart it by double clicking on any vacant spot on the Workplace Shell desktop. To open an object from the Toolbar, just click the left mouse button on the corresponding icon. To access an icon in a drawer, open the drawer by clicking on the arrow. Then you can click on the icon. You can also drag and drop objects onto icons in the Toolbar.

What if you want to add objects to the Toolbar? Just drag and drop the object onto a vacant section of the Toolbar, usually located between the icons already in the Toolbar. This takes a little dexterity with the mouse and your drag and drop skills but it really isn't that difficult. The toolbar will expand as you add these new objects and the little narrow bar will appear above it. If you want to add an object to a drawer, simply drag and drop the object onto the narrow button above the drawer you want to place the object in. The narrow button will change to include an arrow once there are one or more icons in it. To remove an object from the Tool-

Also on the Toolbar are four Action Buttons: Find, Window List, Lockup, and Shutdown. Left click (once!) on the button corresponding to what you want to do. The Toolbar has its own Properties notebook (as do all Workplace Shell objects) so you can change the appearance of the Toolbar and the icons in it. You can even have more than one Toolbar running at the same time. To do this, make a copy of the Toolbar object and start it. Add icons or delete them as you wish.

I have become partial to the WarpCenter as many of you have. But if you want a little previous version reassurance, the Toolbar is just the thing.

Has your fancy been tickled?

I've touched on a few items here that hopefully will tickle your fancy or whet your appetite to experiment. I hope you take the time to see what you can do to make OS/2 Warp 4 just a little more colorful or perk up the mouse cursor. Be creative with the sounds connected to system events, or be nostalgic and use the Toolbar! You can always change everything back if you get a little carried away.

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press release **New WorkSpace On-Demand**

customer and reseller promotion offerings for its upcoming Work-Space On-Demand product, which was formerly code-named Bluebird. WorkSpace On-Demand, the newest member of IBM's eNetwork Software family, is IBM's Intelbased network operating system optimized for network computing.

"WorkSpace On-Demand is ideal for customers wanting the potential to reduce the cost and complexity of managing their networked environments without sacrificing existing hardware and software investments," said Donn Atkins, vice president of marketing, IBM Personal Software Products. "As a member of IBM's eNetwork Software family, WorkSpace On-Demand helps enterprise customers begin exploiting network computing technology today."

WorkSpace On-Demand, expected to be generally available in November through approved IBM Business Partners and IBM direct sales teams, will be priced at \$729 per shrink-wrap copy, which includes the server administration and management utilities, the Work-Space On-Demand client code, and one client access feature. Customers may purchase additional server licenses for \$699 and additional client access features for \$249. Special upgrade pricing will be available for customers using previous versions of OS/2. Upgrade Protection Options (UPOs) will also be offered.

WorkSpace On-Demand, part of the continuing roll-out of eNetwork Software products that allow users to quickly and securely extend their networks, will help customers transition from a traditional client/server model to a network computing environment optimized for 100% Pure Java, providing the potential for reduced cost of management. In addition to supporting newer network computing technologies such as Java, WorkSpace On-Demand will provide support for customers' existing application and hardware investments. More infor-

IBM announced pricing and special mation on WorkSpace On-Demand can be found at www.software.ibm .com/workspace.

> "Modular has for years combined IBM software technology with Modular's Network Client hardware technology to implement turn-key solutions that help customers effectively manage their long term cost of ownership," said Dave Taylor, director of field operations, Advanced Modular Solutions, Inc., Boxborough, Mass. "WorkSpace On-Demand is exciting because it allows us to deliver that same type of solution, but with a new generation of technology where Java provides the freedom to create enterpriseready network computing applications."

Promotions

Also announced were special promotion offerings for customers and resellers. Customers who purchase \$500,000 or more worth of Work-Space On-Demand, OS/2 Warp, or OS/2 Warp Server software from August 26 through November 28, 1997 are eligible for a pilot implementation of WorkSpace On-Demand fully supported by IBM's Rapid Deployment Team and IBM Business Partners. At the completion of the pilot, customers will be provided with a full implementation plan for a widespread roll-out of WorkSpace On-Demand. If a customer does not wish to participate in a pilot, that customer may instead choose to receive free defect support for an extended period of 12 months for OS/2 Warp V3 and OS/2 Warp Connect V3. Defect support allows customers to receive from IBM fixes to product malfunc-

Beginning in October, IBM will hold a series of three-day, no-charge WorkSpace On-Demand workshops in major cities around the world, open to all IBM Certified LAN Server and OS/2 Warp Server Engineers. All attendees will receive 90 days of free telephone technical support, defect support and NFS (Not For Sale) code for pilot implementations. Resellers completing

the workshop will also be able to participate in the WorkSpace On-Demand Quick Start Promotion. This promotion will award qualified resellers \$250 for each customer pilot implemented, and an additional \$500 for each pilot that results in a full scale customer roll-out of WorkSpace On-Demand.

"Over the years IS managers have been forced to move from the low-cost, high-control dumb terminal to the high-cost, no-control of the PC desktop," said Robert J. Sakakeeny, director of field research, Aberdeen Group. "In many environments, WorkSpace On-Demand provides a great balance between users wanting the freedom to run many applications on demand, and IS's need for lower cost of administration through a reasonable amount of control over where those applications reside. For many, this is IBM's response to the dilemma of providing the latest technology to users in an easy to implement and affordable way."

eNetwork software and ondemand networking

WorkSpace On-Demand is part of IBM's eNetwork Software family of networking communications products that provide enterprise-class universal connectivity and information access for cost-effective network computing.

The On-Demand initiative is focused on offering customers a communications platform that provides services for server-based components that are dynamically downloaded when needed by clients. These services will include centralized administration, delivery and network optimization across multiple platforms. The result will be reduced cost of software management and support and more effective application performance across the network. WorkSpace On-Demand and IBM Host On-Demand, a Java-based emulator for Web access to host applications, are the first steps in this direction.

review

Performance Plus V4 review

by Lee Baldwin

I owned Clear & Simple's Performance Plus V3, so I was very interested in looking at the software's next version. The box has an unclear printing design; the label "Clear & Simple" is, well, clear, but it took me two days to figure out that the product inside was Performance Plus V4.

Once the package was opened, I found a book and a floppy disk.

The book

The 114 page book covers, briefly and concisely, what I needed to know about tuning my computer. This is perhaps the best book I have read on tuning OS/2. It's short enough so that I actually read the whole thing!

Much of what is written is valid no matter what operating system you run. Certainly, a fair amount is specifically about OS/2, telling you why OS/2 is better than that Windows product.

Does the book make the product worth buying? Joining POSSI for a similar amount of money could get all of those questions answered that you found in the book, but the answers in the book are written down, giving you the opportunity to review the answers until you "get it."

Software capabilities

The Performance Plus software installation is simple; of course, with a company called Clear & Simple, it had better be! The installation program copies files to your hard disk, and creates a folder and program object on the desktop.

Twenty utilities are included in Performance Plus V4. Twelve have a Graphic User Interface (GUI); the other eight were designed to be executed from the command line.

Seven of the GUI utilities are for fine tuning your system:

O Simple Count measures and logs the general performance of your system. This is the first thing you should do after installation, and will be run every time you change something. Simple Count sets the baseline for the STATS util-

This version of Simple Count takes about five times longer to run than it did in Performance Plus V3. I presume the reason is that, as machines have gotten faster, the program permits enough repetitions so that minor enhancements will be discernible.

In this version, Clear & Simple has also added a "short" version of

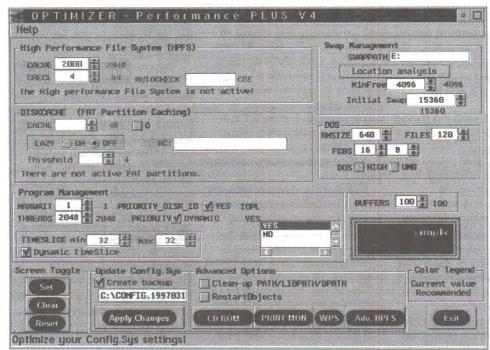
the video test, and the ability to turn off the video test altogether. The long version takes about 180 seconds and the short version of the video test takes about ten seconds per test. Because the company recommends five iterations, this test can take about ten minutes to run. You are not supposed to touch the computer for this period.

O Optimize recommends and modifies several performance settings on your system.

There have been some changes to this screen from previous versions. For example, V3 instructed you to consult the book about where to place the swap file; V4 does so for you. You'll spend most of your time on this screen, as you tweak your system.

- O STATS lets you view the results of several Simple Count measurements. This utility does not appear to have been modified from the previous version.
- BlackBox creates DOS/Windows program objects with recommended settings.
- O Swap file monitor helps you monitor and update swap file growth.
- O Disk timer measures disk perfor-
- O Video performance measurement. The following five GUI utilities help you enhance your personal perfor-
- O ViewBMP: Drag and view bitmaps with an easy Zoom feature. ViewBMP supports .BMP, .GIF, .TIF, .PCX, and .PCC formats.
- O Auto desktop archive lets you set your OS/2 system to generate a desktop archive every "X" days.
- O Disklockey Lite, file manager.
- O Simple ZIP provides automatic backup and zip of directories.
- O OS2boot lets you create an OS/2 boot diskette or partition.

The remaining eight utilities are meant to be executed from a command line. They are written in REXX, the powerful programming language that is included in every copy of OS/2.



What did I do with it?

It would be impossible for me to cover all of the items in this product! I used the tuning utilities extensively, and based on my experience, they're reason enough for you to buy this product.

When I began this review, I was working for Syntellect. I installed Performance Plus on a lot of machines (one at a time, removing it after seeing what it would tell me). At that time, Syntellect was shipping a range of OS/2 computers, from 486/66 systems to 160 MHz Pentium computers. The computers sometimes went out the door with 32 MB of RAM as a minimum, the normal amount of RAM was 64 MB. and 128 MB was not uncommon. The systems included a variety of communications software, including IBM's PCOM, IBM's Communications Manager, TCP/IP, Novell Netware drivers, and so forth; they used whatever protocols that the customer requested. These machines are capable of answering 24 phone lines, have 48 host sessions, FAX back services, and recognize speech... among other things.

As I placed the programs on various machines, I got varied results; this clued me to the fact that the Optimizing product really did look at the unique configuration of each

I ran Simple Count on a lot of machines. I had various interesting problems with running it; one that was persistent had to do with IBM Antivirus. When the "Program load" section of Simple Count ran, DOS windows would not close. That often left me with 25 or more open DOS windows. I had to turn off Antivirus in order to get consistent times.

I also ran Optimize on a lot of machines. I found that running Optimize with the defaults does not guarantee that your machine will run faster! What it will do is give you indications of what effect changes will cause. On my machine at home, by using the recommended settings,

the machine actually takes longer than before I started.

All of these modifications need to be done when your machine is running all of the software you normally will have going. For instance, the size of the initial swap file should be based upon having all your regular background programs loaded. If you have Email going, have it going while you run the Performance Plus utility. You should have seen the size of the recommended initial swap files on the machines that have 24 PCOM, 24 TREXX programs, and answering 24 phone lines! A 64 MB swap file was not abnormal.

What is the best number of threads? How many buffers? These are questions that most of us can't answer without a massive amount of testing. This program gives you a close start, though, again, it requires the applications to be running.

When I used the recommendation for threads on a new installation of OS/2 Warp 4, I got the famous "Blue Screen" at startup; I could go back in and change it back and the machine would boot to the desktop.

Improving real performance

An important item to determine, for yourself, is what "faster" means for you. At Syntellect, the speed of the video was not as important as the speed of program load.

The size and number of buffers can slow down small programs and speed up large one, or vice-versa, depending upon the settings. As I run my machine at home, I can see that my video card could use a lot of help. If you were to buy a new video card, you could now bring it home and test it against your current unit. If it doesn't measure up, take it back! Without some method of measurement how would you know?

One new choice in Optimize is "Clean up PATH/ LIBPATH/ DPATH." This is an extremely useful tool for anyone who reinstalls or removes software from their machine with any frequency. This utility informs you of, and will remove, duplicate entries and missing directories from the paths. Many of the machines on which I tested this software had some entries that could be removed, potentially speeding up access through the

The STATS utility lets you view the results of several Simple Count measurements. While this utility does not appear to have been modified from the previous version, it didn't really need much enhancement. It does an excellent job of allowing you to see what the results are, with enough choices of how the information is displayed to make me happy.

Was it worth it?

I have no intention of giving this software back! Even though I have finished reading the book, it is still sitting on my computer desk and will not be relegated to the storage boxes out in the shed.

Performance Plus V4 is valuable to any company that produces computers that are response critical, such as Interactive Voice Response machines or servers. The software is a valuable aid in tuning those machines.

Would this software be of benefit to the home user? My unqualified answer is Yes! The non technical home users will benefit from the easy accessibility of many of the utilities. Performance Plus V4 can speed up the machine and clean up the mess after software modifications. The book will give you a better understanding of your hardware and what it's up to-a better understanding than have most salespeople at CompUSA.

What about the normal OS/2 user, the kind I meet at Phoenix OS/2 Society meetings? My personal opinion is that they should all own it! We all tweak our machines regularly, modifying hardware and software, and just generally messing around. Performance Plus V4 is a good piece of software that allows me to "get it back together" when it becomes time to do some real work on my home PC. @

Stardock announces Entrepreneur

Stardock Systems has announced its makes sure your company is reprenew strategy game, Entrepreneur. Entrepreneur is a real-time, multiplayer strategy game set in the world ment, you try to engineer your prodof business. It is not a business simucts to meet their demands. ulator, nor is it a shoot-em-up game. In essence, the idea behind Entrepreneur is that every day, corporate CEOs at companies like Microsoft, Apple, IBM, Time Warner, and TCI are waging all-out war on each other.

"Why should the Bill Gates and Steve Jobs of the world get to do this sort of cool stuff? Now everyone can try to crush their enemies in business!" said Brad Wardell, President, Stardock Systems, Inc.

In Entrepreneur, players start a company and choose a market to conquer. The game ships with the computer market; other markets will become available from Stardock and third parties.

The player begins with a single site and a sales executive. The site provides a location to build the marketing, research, sales, manufacturing, and recreational buildings that porate empire. The sales executive

sented in its region of the world.

Through research and develop-However, different parts of the world have very different demands. For example, one player may dominate North America through leadership in reliability, while the buyers in Europe may demand performance. Thus your company may become a minor player in that region, compared to companies ahead of you in performance.

Entrepreneur lets people see just how powerful marketing is. As the player's company grows, it can build up its marketing infrastructure. Soon, it will create all types of different marketing campaigns, ranging from TV to good old FUD (Fear, Uncertainty and Doubt). Marketing campaigns act as movable units on the map, so players can move those units to places they think they can do the most damage.

On top of all this, certain regions make up the backbone of every cor- have special resources. If the player is the market leader in a region with a special resource, he or she gets access to it. The resources types are political, scientific, labor, criminal, and media. If the player has enough of these resources, Direct Action Cards that are available will begin to light up. Players receive a random Direct Action Card at the beginning of each game year.

> Direct Action Cards are the great equalizer of Entrepreneur; their powers can vary between insignificant to helping clinch the game. Have enough political resources? Then use your clout with the government to shut out a competitor from a target region. Hold enough labor resources? Lure away an enemy sales executive or incite a labor strike at a target region. There are dozens of cards in Entrepreneur to choose from and they really do stir things up.

The game is won when any player has achieved a basic monopoly share of the market. You don't necessarily drive your opponents out of business; you might keep

them around for antitrust purposes—like, say, giving them \$200 million to keep them afloat.

While many games that have multi-player support have poor artificial intelligence (AI), Stardock takes its computer players seriously. The AI in Entrepreneur was developed by the same team that created the AI for Galactic Civilizations (the 1995 game of the year, according to the Internet Top 100). Each computer player has a unique personality, so that one computer player that makes a mistake may not be found in a different one.

Multi-player play is pretty much expected today and Entrepreneur may have the best Internet performance of any game currently available. Players can play people from around the world; Entrepreneur can handle latency times as great as 5 seconds or more without missing a beat. (Most games can't handle more than 1/2 second). With STARDOCK.NET, players can visit other players in a chat forum within the game and join in easily-no searching around for someone to

Another unique feature to STARDOCK.NET is its hall of fame. The top 100 scores are kept track of so players can get an idea of who is the best. Imagine Quakeworld or Battle.net where players can keep track of the number of "frags" and thus be recognized for their... ruthlessness.

Entrepreneur will be generally available from select retailers beginning October 10. It will also be available directly from Stardock at 1-888-STARDOCK. Entrepreneur's list price is \$49.95.

Stardock Systems can be reached at 313-762-0687, fax 313-762-0690, or email info@stardock.com. Stardock's web site is www.stardock.com. The game requires a high end 486 PC or better running Windows 95, Windows NT, or OS/2 Warp 3 or later, and a CD-ROM drive.



.random bits **New applications**

compiled by Esther Schindler

These applications were released or significantly upgraded in the last month. If you're interested in writing a review, contact Craig at reviews@possi.org.

Beatles Song Index

The Beatles Song Index provides information about the songs of the Beatles. All songs they recorded and published officially were evaluated for the Beatles Song Index. The index was compiled as Windows and OS/2 help files and uses all features of the Windows or OS/2 help system including hypertext function, keyword search, and bookmarks.

The following information is available for every song: song composer, main vocalist, recording dates and places, producers and sound engineers, running time, guest musicians, release date, highest UK chart position for single and EP releases, recorded takes, and a selection of recorded cover versions by other artists.

The index focuses on the songs, and does not attempt to be a complete discography of Beatles releases. Taken into account for the index are all the songs that were officially published in the United Kingdom, as well as additional songs which were recorded during the "Get Back" sessions and were exclusively published in the Let It Be film. You can also find songs which the Beatles have written and given away to other artists but never recorded for themselves. Included in the index are the "speech" tracks available on the Live At The BBC album and the Anthology albums. Some statistical evaluations of the song material round off the functionality of the index.

The Beatles Song Index can answer the following questions, for example: Which songs were recorded on July 30, 1963? Which songs have a duration of 2'32"? Which songs were recorded in London's Olympic Sound Studios? Which Buddy Holly songs did the Beatles record? What was the working title of "I Saw Her Standing There"? Which was the highest

chart position of the All My Loving EP? On which songs did George Harrison sing the lead voice? Is there a live version of "Help!" and on which album is it available? Sidnev Sax plays violin on several Beatles songs; which ones?

Note: The evaluation copy contains only songs beginning with letters from M-Z. The registered version contains all songs.

You can find more information about the Beatles Song Index at www.geocities.com/Paris/5140. Its price is \$60.

MD+F Marauder 3

Modular Dreams Incorporated released MD+F Marauder 3 (MD+F M3), their second SX based Internet graphics application for IBM OS/2 Warp.

MD+F Marauder 3 is an image database, search, and browsing tool designed to handle chaotic image collections which can result by downloading images from the Internet or the World Wide Web. Features include:

Image Browsers: Examine contents of directories, virtual directories (catalogs), or other groupings of images.

Image Choosers and Slideshow: Examine and filter images to be kept or disposed of.

Image Attributes: Assign attributes to images. By assigning attributes in different categories, you can make if easier to find specific images.

Quick Search: Search your drives or M3's database for images.

Comprehensive Search: Search your drives or M3's database for images based on their name, description, or attributes. You can specify wildcards and logical operations when searching by file name.

Drive Management: Use more meaningful names for drives, such as ZIP: instead of the DOS drive let-

Media Management: Distinguish storage media from each other. Instead of using DOS drive names like I: for each Zip diskette, you can assign them unique names such as ZIPDISK1: or ZIPDISK2:.

M3 even lets you search and browse contents of removable media when not inserted into the drive.

MD+FM3 doesn't interfere with how you handle your image files. You are free to move around or delete files anyway you wish. It will learn and upgrade its database to match the changes as it encounters

MD+F M3 also includes other common SX features such as basic image processing operations, collapse and resurrect, and C++ Scripting.

You can get current information about the MD+F M3 from Modular Dreams at their website located at www.modulardreams.com. MD+F M3 is available in electronic format as well as on diskettes. The MSRP for MD+F M3 is \$99.95.

Modular Dreams Inc, PO Box 682, Vienna, VA 22183. Email: mdf@bix.com, Phone: 703-968-6221, Fax: 703-968-4339

WebMirror

WebMirror is an OS/2 utility (with a Windows version, too) that can be used to retrieve entire sites, or part of them, from the World Wide Web. Sites are stored in a compact database on the local hard drive and can be viewed offline using an internal HTTP proxy server.

WebMirror can be used by network administrators to provide access to frequently-used Web sites in their corporate intranets, or provide secure Web browsing to selected sites without the need for expensive firewalls, routers, and Internet connections.

WebMirror can also be used by CDROM makers to dump entire web sites on CDROM. You don't have to worry about editing Web pages to reflect the local storage organization and limitations; the pages are retrieved directly from the original Web site and stored in a standard 8+3 database file.

WebMirror is also useful to private individuals who don't want to spend money reading the page's contents on-line. You can retrieve an entire site (or a portion of one), then disconnect and enjoy reading

without worrying about the phone bill going to the stars.

Among WebMirror's features

WWW Mirroring: WebMirror retrieves HTM documents, inline images, and linked files to the local computer system. All links traversed are retrieved, regardless of file format. WebMirror even retrieves some clickable image maps.

HTTP Proxy Server: If you must use a proxy server to access the Internet beyond a firewall, WebMirror allows the use of a proxy server. WebMirror is fully compatible with Internet Gate and other firewall or proxy servers.

WWW Caching: When using the internal HTTP proxy server, WebMirror can be configured to cache pages that are not already present in the mirroring cache.

Use standard file names: Web-Mirror stores files in a single database file with a standard 8.3 DOS file name. HPFS partitions, while suggested for performance reasons, are not required.

Configurable time to live: Retrieved HTML files are always updated from the remote site, but inline images are updated only if changed or the configured "time to live" has expired. This ensures that the pages you are viewing are the most recent.

Depth restriction: WebMirror processes links in a breadth-first search pattern. All links from a document are traversed; then the links from the traversed documents are followed. By restricting the depth of the search, you limit the number of links to be followed. (You should be cautious since a breadth-first search may exponentially increase the number of links to follow at each depth.)

Shareware product, with registration costs ranging from \$25 to \$265. Visit the developers web site at www.maccasoft.com.

Ultimate OS/2 Games CD, Volume I

Galaxy Class Systems announced The Ultimate OS/2 Games CD, Volume I. This is the first in a series of game CD-ROMs for OS/2. It

contains full, registered versions of OGZIP support.

- O Entertainment Pack for OS/2, by Peter Wansch
- O Toyland, by Rainald Menge
- O Matrix, by Michael Shillingford
- O SeaHaven Towers Solitaire, by J. Daniel Kulp
- O Aquanaut, by Paul Stanley In addition to the above games, The Ultimate OS/2 Games CD, Volume I contains demo versions of several popular commercial OS/2 games:
- O Galactic Civilizations II
- O Trials of Battle
- O PlusPak: B.U.G.S.
- O Entrepreneur

Finally, the CD-ROM contains the latest FixPaks from IBM for OS/2 Warp versions 3 and 4. With the fix packs on CD, you don't need to download 10MB to 20MB of disk image files, and then create install floppies. You can just upgrade your system straight from the CD!

The Ultimate OS/2 Games CD. Volume I will be available in October from BMT Micro, for \$34.95.

For more information see www.ionet.net/~colin /uos2gcdv1.html

Galaxy Class Systems (GCS) is an OS/2 information provider and software publishing company based in Stillwater, OK. GCS maintains the popular Ultimate OS/2 Gaming Page (www.ionet.net/~colin /games.html) and the Unofficial AWE32 and OS/2 Page (www.ionet.net/~colin /awe32.html). GCS can be reached by E-mail at warped@ionet.net.

VRML/2

Now Enterprises released VRML/2, the first native OS/2 VRML 1.1 browser that uses OpenGL to render high quality 3D images. VRML, the Virtual Reality Markup Language, is the next step towards cyberspace.

Some of the features include:

- O Multithreaded operation
- O Drag and drop colors and font almost anywhere.
- O Drag VRML files onto the main viewing area.
- O Texture mapping.
- O Helper friendly for Netscape and others.

- five popular shareware OS/2 games: O Save snap shots of view (great for backgrounds).

Visit www.interlog.com/~lmcrae for details. The archive is available at Hobbes (nmsu.hobbes.edu) and ftp.cdrom.com, as vrm12_1.zip.

PlanetWide Web server

PlanetWide v1.10 is a powerful, multithreaded, 32-bit OS/2 HTTP Web server. It was developed to serve high volumes of data from the OS/2 Warp platform, and do it efficiently!

As Webmaster, you require an HTTP server that is lean on the system resources, and still performs. PlanetWide was written with a textbased interface, preserving precious memory and virtual swap space.

The log window and text window provides a lot of important information. The server configuration is very simple, and you should be up and running in just a few min-

Features include:

- O Configurable maximum number of connections.
- O Configurable maximum packet size (BLOCKSIZE).
- O Support for a large number of simultaneous connections.
- O Full reverse DNS lookup per connection.
- O Complete logging of all incoming connections including number of threads in use.
- O Built-in NCSA imagemap support (RECT, CIRCLE, POLY, and DEFAULT).
- O CGI interfrace for running external EXE and CMD files (GET and POST).
- O Allow/disallow any IP number, range, or subnet on a per directory basis.
- O Directory and file security on a per directory basis.
- O Configurable remote server kill from your web browser. Available at BMT Micro. Registra-

tion is \$45.

WebNavigator

JMA Software Technologies shipped WebNavigator 1.13, a compact and easy to use Internet Web browser.

One bad software decision can ruin your whole day.

Let's face it. When it comes to choosine the right utilifor your OS/2 system, you can't afford to take risks. You need a proven set of disk, file, and desktop utilities which are reliable and effective. One that supports multigigabyte partitions, HPFS and FAT file formats, long file names, with both PM and command line utilities. With qualified product support representatives accessible from the internet, compuserve, phone or fax.

What you need is the SofTouch Suite family of OS/2[®] utilities from SofTouch Systems, Inc. Our disk and file utilities improve system performance with HPFS and FAT defraggers, repair damaged INI files and user desktops, fully uninstall applications, move applications across different partitions and manage hundreds of thousands of files in directories and drives spanning multiple gigabytes of space. Our software repairs damaged partitions, rebuilds corrupted desktops, and recovers critical HPFS data files - everything you need to maintain your custom OS/2 system.

Call SofTouch Systems and ask for the SofTouch Suite. We've been helping users like you since 1991 and OS/2 1.1.

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SIS



http://www.softouch.com

Features include online and offline browsing, news and mail support, internal/external downloads, selection of a new link while a document is loading, and an easy to use QuickList.

WebNavigator supports HTML 2.0 plus some features of HTML 3.x. The level of HTML compliance In WebNavigator is the same as IBM's WebExplorer, because Web-Navigator uses the same Web sup-

WebNavigator requires OS/2 Warp 3 or OS/2 Warp 4. WebNavigator also requires IBM TCP/IP support and WebExplorer (to get the DLL file WEBEXWIN.DLL that WebNavigator needs).

WebNavigator 1.13 ships in Trial and Registered Editions. The Registered Edition costs \$25. The Trial Edition may be evaluated for 30 days; it has a timeout, with feature limitations. The Trial Edition is available for download from the company's Web site and from several public FTP sites.

Contact JMA Data Software Technologies, Martin Alfredsson, jma@jmast.se.

WebDock

The WebDock Shopping Cart is a fully functional easy to use Internet shopping system that integrates eas- Contact eddie@web-dock.com, or ily into your HTML documents. Merchandise data is maintained in a server side database containing all

your product information for easy updates.

Example server side data includes product code, product sales description, price, availability, and any information about your products or services necessary for distri-

The system requires a Web server capable of using REXX for CGI. It has only been tested on OS/2 Warp 4, using the IBM ICSS server version 4.2 and up, and CompuSource PowerWeb version Pure Java on both client and server side in the near future. The Java version is fully interchangeable with the REXX version.

Client side Web browser requirements include a JavaScript-enabled browser (Netscape 2.0-4.0 or IE 3.0-4.0). Plus, to use the Advanced "easy" maintenance mode, client side browsers must be Netscape 4.0 or IE 3.0 and above.

In the works:

- O Different shopping cart themes (clickable graphics, different colors, different buttons, etc.)
- O Browser-based configuration and maintenance for both system administrator and client.
- O Better system management for multiple shopping carts www.web-dock.com/shopping /index.html

ZipZap

ZipZap makes handling ZIP files easier than it has ever been before! ZipZap is fast and efficient because it is integrated into OS/2; you can use popup menus, drag and drop, and template objects to take all the work out of managing your ever growing mass of archived files and relegates it to a few clicks of the mouse or the keyboard. Requires OS/2 3.x or 4.x and the latest versions of InfoZip's (free) ZIP/UNZIP. Available at BMT Micro. Registration is \$25.

Stats

Stats makes it easier to see the data in files, folders, and directory trees, using easy popup dialog boxes. Instead of searching through note-

book pages over and over... instead of having to go to the dreaded command line... try Stats! With a single click, you can see the important file dates, size, and attributes. See complete file size stats for folders and directory trees. Stats also supports folder statistics in the titlebar of every folder. Customizable, fast, and efficient! Requires OS/2 3.x or 4.x.

Available at BMT Micro. Registration is \$15.

PM2You and OS2You

4.02r9. WebDock will provide 100% PM2You allows you to remote control the OS/2 Presentation Manager/ Workplace Shell Desktop and run OS/2 Presentation Manager or character mode applications. This is ideal for software developers and large corporations with support staff that would benefit from seeing the same screen as another user, located at a remote site. It is also suitable for remote maintenance of servers and other unattended equip-

> PM2You can be installed with OS/2 1.x, 2.x, or 3.x. You can remote control the OS/2 machine from another OS/2 computer or a Windows-equiped computer.

The PM2You tool is extremely easy to install and supports a wide range of different hardware options. It does not require that any other software than OS/2 is installed. By using advanced compression algorithms it is possible to use PM2You over dial up modems over ordinary phone lines.

OS2You is a text mode only variant of the PM2You product. It supports the same communication environments as PM2You and has the same features except that it won't allow control of the Presentation Manager desktop.

Now, you can register for these products at BMT Micro. Registration for PM2You is \$215, and OS2You's registration is \$75.

OS/200ns

by Harry Martin



The OS food chain

Finally... Photo, Text & Draw All in One Application!

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TrueSpectra Photo>Graphics allows you to combine photos, drawings and text for unsurpassed graphics! Change the colour of objects; place text on photographs; duplicate or crop images; enhance contrast and brightness or zoom in to highlight the most minute detail on a photograph collage, business presentation or advertising flyer.

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- Cut & Paste/Drag & Drop
- · Edit in full 24-bit colour
- Fast 32-bit code
- · Unlimited effects
- Unlimited layers

for less

· True transparency for all objects



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The Phoenix OS/2 Society, Inc

The Phoenix OS/2 Society is a computer user group dedicated to OS/2. We have been publishing our award-winning magazine, extended attributes since August of 1994, and we have members all

Yes, this is a user group publication, and that sometimes shows; however, that's also an advantage, since you get real-world feedback about OS/2 and OS/2 products from other users, not just jaded, cynical journalists.

How useful will it be to join the Phoenix OS/2 Society if you aren't in Arizona? We see the Phoenix OS/2 Society as something akin to the National Geographic Society or the Smithsonian; while most members only see a magazine, you're actually a member of a society, and can participate in its activities when you happen to be in the area.

Even without activities that take place in Phoenix, Society membership includes product discounts that alone could make membership worthwhile. Taking advantage of one such discount could easily save you the entire cost of membership, giving you a "free" subscription.

Plus, the Society is prominent in the computing community. We are already heard by IBM; they listen to what we say. Several IBM executives get extended attributes. They don't get it for the "club news"—they use it to learn what OS/2 users really care about. And they respond to what they

You're not just getting a magazine. You're getting a voice.

If you would like to continue to receive the magazine, fill out the membership card in the center



Phoenix OS/2 Society, Inc 5515 N 7th St, Ste 5-133 Phoenix, AZ 85014-2585





